previous to its discovery on Nantucket in September, 1907, where it was probably introduced (Bull. Torr. Club 35: 195, 1908). Subsequently it was reported as having been found in Southboro, in August, 1909 (Arthur J. Eames in Rhodora 12: 205, 1910).

It cannot be said positively that this grass was not adventive on Marthas Vineyard, but there was nothing in the manner of its occurrence there to suggest that it was not of the indigenous flora.

NEW YORK CITY.

OLD-TIME CONNECTICUT BOTANISTS AND THEIR HERBARIA,—I.

C. A. WEATHERBY.

John Pierce Brace.—To claim Mr. Brace as a botanist is, perhaps, to make an unjustifiable raid on the other fields in which he was, more notably, active. Teacher, editor, author, amateur in most of the natural sciences and well-versed in "such out-of-the-way subjects of investigation" as "heraldry, astrology, the decyphering of cyphers and composing of music," his botanical interests formed but one facet, and that a small one, of a many-sided mind. Nevertheless he did publish the earliest local flora of any part of Connecticut; all his life he carefully kept an herbarium and for most of his life continued to add to it; and, according to the writer of his obituary, "....flowers were his pleasure almost in his dying moments and the last names he forgot were the botanical." In so far he must be classified as a botanist.

John Pierce Brace was born in Litchfield, Feb. 10, 1793, a descendant of Stephen Brace who settled in Hartford in 1660. His aunts, the Misses Pierce, proprietors of the Litchfield Female Academy, superintended his education and sent him to Williams College, where he graduated in 1812. Thereafter he lived for some twenty years at Litchfield, most of the time, apparently, as teacher at the Academy, a school famous in its day and one which attracted pupils from far and near, though its "plant" consisted of a single small building containing one plainly furnished class-room. In 1816, he was one of seven young men who clubbed together to purchase the memorable stove, the heat

of which, on the Sunday when it was first set up in church, caused such discomfort to the older and more Spartan members of Dr. Lyman Beecher's congregation — until they discovered that there was no fire in it. It was during this period that Mr. Brace's interest in natural history seems to have been most keen.

In 1820 he married Miss Lucy Porter, a sister of the second Mrs. Lyman Beecher. In 1833 he moved to Hartford to become principal of another well-known school of that time — the Hartford Female Seminary. As a teacher, he seems to have possessed unusual ability. One of his pupils was Harriet Beecher Stowe, who afterward took him as the original of "Rossiter" in "Old Town Folks." There, and in a letter of reminiscence printed in Lyman Beecher's Autobiography, may be found an interesting account of his methods and personality. He was especially good in English composition. He needed to be, to arouse in a girl of nine, even one who was destined to become a writer of prominence, any enthusiasm for the subjects which in those days were wont to be assigned for the puzzlement of youthful heads — "The Difference," for instance, "between the Natural and Moral Sublime." But Mrs. Stowe testifies that he accomplished it.

Mr. Brace's name appears in successive Hartford directories as principal of the Female Seminary until 1846. Then, for a while, he lived in New Milford; and about this time he may have written the novels, one of which was published in 1847 and another, a tale of the early days of Hartford, in 1853. About 1850 he became editor of the Hartford Courant. His successors testify that he made an excellent editor, even as he had made an excellent teacher. Certainly, his editorials show a humor and a quaint way of mingling classical allusions and colloquialisms which makes them, even today, by no means unentertaining reading. For years, we are told, he was able to do all the work required to fill the columns of his daily issue, "the editorial variety being small and city or local news only such as accidentally found its way to the office." That office was in an old attic room, "filled with books on all sides — a valuable library, too — and everything in it covered with dust and cobwebs." Doubtless this is the room to which his niece, Mrs. Asa Gray, used to climb when she stopped over in Hartford in the course of annual visits to her relatives in Litchfield.

Mr. Brace remained editor of the Courant during the ten years of gathering political passion which preceded the Civil War. In 1861

he retired, being then, as one of his successors informs us, "looked upon as a very old man." Afterward, however, he was married a second time (his first wife had died in 1840) to Miss Louisa Moreau; and returned to Litchfield, there quietly to spend his last years. He died Oct. 18, 1872.

In the preface to his "Flora of the Northern and Middle States," Dr. Torrey includes Mr. Brace among the botanists for whose assistance he makes acknowledgment, and cites his specimens and notes some dozen times in the body of the work. But, so far as I am aware, Mr. Brace's own published botanical work is confined to the "List of Plants growing spontaneously in Litchfield and in its Vicinity," which appeared in Silliman's Journal in 1822. This list contains an extraordinary number of misprints; but, in spite of such superficial disfigurement, remains a good record of personal observations at a time when the maker of a local flora, were it no more than a bare catalogue, could still be a pioneer. Mr. Brace was an amateur and knew his limitations. He attempted no changing of names nor descriptions of new species. In these matters, he was evidently guided by his correspondent, Dr. Torrey. He records 453 species with the habitat, time of flowering, color of flowers and frequency of occurrence, of each. In the case of the rarer species, definite localities are often given. Such a list is always of interest to students of a local flora, for the bits of evidence it gives as to the history and spread of introduced species and as to changes in floristic conditions; and, sometimes, for its omissions. The most significant of these, in the case of Mr. Brace's list, is Marsilea quadrifolia. To botanists of the present generation, the Bantam Lake station for that species is classic, as the single one in North America where the plant may be native. But it was evidently unknown to Mr. Brace: indeed, the earliest mention of it I can find is in the addenda to the fourth edition of Gray's Manual, published in 1863. The station at Cromwell, Conn., which has existed, unknown to fame, for at least forty years, may be as old.

Rossiter, in Old Town Folks, "had a ponderous herbarium of his own collection and arrangement over which he gloated with affectionate pride." Doubtless this is literally enough true of Mr. Brace; and an added interest is given to his list by the existence of his herbarium which is still preserved at Williams College. There, through the kindness of Professor Clarke, Mr. C. H. Bissell and the writer were recently permitted to examine it. It is somewhat shrunken from Rossian and the writer were recently permitted to examine it.

siter's which "filled forty or fifty folios" — twenty-eight is the actual number — but still of goodly size, containing some seven thousand sheets. They are chiefly of flowering plants and ferns, but there are a number of mosses, lichens and algae, and one mushroom — a species of Boletus. The plants are mounted on separate sheets of about foolscap size, are arranged systematically according to the older editions of Gray's Manual and are kept in leather-backed portfolios evidently made especially for them. They show every evidence of having been well cared for, both during Mr. Brace's life and since. The specimens are brittle from age but otherwise in first-rate condition. Most of them have been poisoned and the damage done by insects is negligible. They are mounted on various kinds of paper whatever came handy: half sheets of foolscap, leaves from old account-books, pieces of plain white or bluish paper — and are attached to the sheets in equally various ways. Some are sewed, some are glued, some are held in place by strips of gummed paper and some by strips of plain paper secured at the ends by the red adhesive wafers with which our grandfathers sealed their letters—a method which adds brilliancy to the color-scheme of an herbarium but is not otherwise to be recommended. According to present-day standards, many of the specimens would be considered rather fragmentary, but they are carefully prepared and usually sufficient to show the distinctive characters of the species concerned.

Besides Mr. Brace's own collections, the herbarium contains many specimens, both North American and foreign, from other collectors. Among American botanists, Oakes, Sullivant, Charles Wright (his first Texas collection), Asa Gray, Ravenel, Ives, Torrey, B. D. Greene, Dewey, Cooley, Olney, Nuttall, Darlington, Short, Elliott, Bigelow and Barratt are represented by one or more specimens. And there are numerous foreign ones, chiefly from Europe. Several specimens, mostly of introduced plants, are of interest to Connecticut botanists. Sisymbrium Sophia, recorded in the Catalogue of Connecticut Plants only from a recent collection at Naugatuck, Mr. Brace has from New Haven. Senecio vulgaris from Hartford, considerably antedates any collection from the state hitherto recorded. Ballota "nigra," naturalized near New Haven," is doubtless considerably earlier than the Eaton collection listed in the Catalogue. Rynchospora fusca from Norfolk is not otherwise known from the northwestern part of the state. A sheet labelled: "Grasses found in my front yard at 224 Main St., Hartford, July, 1861" contains two species, one Lolium perenne, the other Cynosurus cristatus. The latter is one, and by far the earlier, of two known collections from the state. The Hartford station has long been extinguished under shops and paving-stones but the record is interesting.

The enquirer who seeks to learn from Mr. Brace's own collections the actual basis for some doubtful reports in his list and the significance of some names which because of nomenclatorial or other changes, are no longer clear, will meet with some disappointment. In Mr. Brace's day, the usefulness of an herbarium as a record of distribution had not been perceived: its sole function was to preserve representative examples of different species. Other information could be relegated to a note-book. Mr. Brace proceeded strictly on this theory. Of most species he has kept only one specimen; three is the maximum. If he had a good specimen of, say, the dandelion from Europe, he did not think it necessary to preserve a Litchfield specimen also, though he would sometimes write "found here" on a foreign sheet. And he did not, as a rule, record date and place of collection. The result is that, of the 453 species recorded in his list, just thirty are represented in the herbarium by specimens definitely marked as from Litchfield. It is, however, possible by various processes of higher criticism, to make out what specimens are probably from Litchfield and to determine with some degree of certainty, the identity of the plants Mr. Brace really had, in cases where the list leaves us in doubt. In addition to the thirty marked as from Litchfield, fifty-four bear statements of habitat, often differently phrased from those in the list, but usually essentially the same, which would indicate that these plants had come under Mr. Brace's eye. In two cases, - Scirpus validus and Eriophorum callitrix — this conjecture is borne out by the presence in the Torrey herbarium at New York of duly labelled Litchfield specimens; and in one—a rather marked form of Scirpus occidentalis — by the collection, during the past summer, of identical material at the locality - Dog Pond, Goshen - given in the list. Also, though Mr. Brace was careless as to his own specimens, he usually provided some inscription, such as "Middle States," "from Prof. Dewey" or the like, on those he received from others. Finally, he numbered, not so much his specimens as his species — all plants of the same species, if there were more than one, receiving the same number. This numbering evidently began with the spring collecting of some

particular year — Symplocarpus foetidus is no. 1, Alnus incana 2, Epigaea 3 — and continued chronologically, each species receiving its number consecutively, as it was obtained. It is possible, roughly, to follow spring, summer and autumn flowers through successive years. The starting point of the series seems to have been the spring of 1818. A fly-leaf from an old account-book is used as a mountingsheet and on the back of it is written: "Plants collected in Litchfield in 1818." Other similar sheets, bearing on their backs the names of plants, statements of habitat and dates of collection, numbers (always low) and the marks of specimens which have been removed, reinforced by a reference to "my old Herbarium" in a note of Mr. Brace's, show that he originally kept his material in large blank-books, putting as many specimens (and species) on each page as it would hold and inserting them as collected. Later, when he wished to make a systematic arrangement, these specimens were taken out and either remounted or replaced — and much data, which we should now like to have, was lost in the process.

One specimen, marked as received in December, 1824, is numbered 1960. With these clues to the chronology of the numbers, it is possible to figure roughly what number a given specimen should bear to have been collected and in Mr. Brace's hands before the date of the list, 1822. It should be below 1400 — the great majority are actually below 1300. If then we find a plant not definitely marked as from elsewhere, numbered below 1400 and bearing a name used in the list, there is a good probability that it was collected by Mr. Brace at Litchfield, and a better one that it shows what he meant by the name used. It may do this, even it were collected by some one else.

This method does not work with entire smoothness, nor always with satisfactory results. Gratiola virginiana, for instance, is described in the list as having purple flowers. One would guess that this came from confusing Ilysanthes, which is not in the list at all, with G. virginiana of Elliott, which is described as purple-flowered, and that true G. virginiana would be the plant listed as G. neglecta Torr. But the specimens of G. neglecta and G. virginiana in the herbarium under different numbers, are both good G. virginiana; Ilysanthes appears under the name, Lindernia, which it usually bore in the earlier floras; and we are left with nothing but our original guess. And specimens from other collectors will not do at all in critical cases. The record which we should most like to verify is that of Isanthus brachiatus.

The claim of that species to admission to the Connecticut flora rests on Mr. Brace's list and a specimen of Charles Wright's at the Gray Herbarium. The latter is marked as from Wethersfield, but the accuracy of its label is under suspicion. Mr. Brace's single specimen is *Isanthus* without doubt; but it was collected in Ohio by Sullivant. One can hardly base a Connecticut record on such evidence; someone will still have to collect *Isanthus*.

Nevertheless, even the most data-less portions of the herbarium may be made to yield some evidence as to doubtful points; and it is possible to dispose satisfactorily of all but one of the Brace records in the list of excluded species in the Catalogue of Connecticut Plants. Thaspium aureum and Gentiana Saponaria are, as would be supposed, Zizia and G. Andrewsii respectively. Ranunculus Flammula is R. laxicaulis; Euphorbia dentata, E. hirsuta; Pycnanthemum aristatum, P. muticum. The one exception is Veronica Beccabunga of which Mr. Brace has only a European specimen. The species is reported as introduced at a few localities in North America; but it is altogether probable that what Mr. Brace had was V. americana.

The following list of species represented in the Brace herbarium by specimens definitely marked as from Litchfield is appended in the hope that it may be of interest to students of the local flora. In each case, the name first given is that used in the Brace list; where this has been superseded in present-day usage, it is followed by its current name or by that of the species to which the plant in question is now referred.

Acorus Calamus.

Agrostis mexicana. Of the two plants on sheet no. 1384, one is Muhlenbergia tenuiflora, the other, marked Litchfield, M. mexicana—the only specimen of that species I have seen from Litchfield County.

Alopecurus geniculatus. Plant is the var. aristulatus.

Arundo canadensis. Calamagrostis.

Callitriche heterophylla.

Carex flava.

Comptonia asplenifolia. Myrica.

Convallaria bifolia. Maianthemum canadense.

- " pubescens. Polygonatum biflorum.
- " racemosa. Smilacina.
- " umbellulata. Clintonia borealis.

Cornus circinata.

Eriophorum virginicum. "Cranberry Pond swamps."

Festuca. Mentioned in a foot-note in the list as "a new species of Festuca differing from F. fluitans in having acute glumes." Glyceria acutiflora.

Gentiana quinqueflora.

Juncus effusus. Plant is var. solutus.

Milium pungens. Oryzopsis. "Top of Mt. Tom." The only collection from west of the Connecticut River.

Orchis ciliaris? Habenaria blephariglottis. "Cranberry Pond Swamp." Not now known from that locality.

Orchis psycodes. Habenaria.

Osmunda spectabilis. O. regalis.

Poa trivialis. P. triflora as to the Litchfield plant. Another on the same sheet "from Cooley" is good P. trivialis.

Potentilla floribunda. P. fruticosa.

Prunus depressa. P. cuneata. "Top of Mt. Tom."

Utricularia cornuta. "Cranberry bog."

Uvularia sessilifolia.

Veronica arvensis.

- " sentillata. A misprint for V. scutellata.
- " serpyllifolia.

Xyris jupicai. X. caroliniana.

In addition, there are the two specimens at New York mentioned above, and in the Brace herbarium one sheet of *Muhlenbergia soboli-* fera and one of Clethra alnifolia.

For some reason, the two latter species are not included in the list.

EAST HARTFORD, CONNECTICUT.

The Twentieth Annual Field Meeting of the Josselyn Botanical Society of Maine will be held at Van Buren, July 14–18, 1914, with headquarters at the Hotel Hammond. Further notice, with program, will be sent to members, and to any persons interested, on request, at least two weeks previous to the meeting.—Dana W. Fellows, Secretary, Portland, Maine.